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Masaki Kato

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EXAMINER

FISCHER, MARK L

ART UNIT

PAPER NUMBER

2627

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,481	<b>Applicant(s)</b> KATO ET AL.	
	<b>Examiner</b> MARK FISCHER	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-12 and 15-30 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the third recording layer, the third test writing area, the third region of the third test writing area as claimed in claim 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Objections***

3. Claims 6, 7, 13, and 14 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Narumi et al. (EP 1,318,509 A1, hereinafter Narumi).

Regarding claim 1, Narumi discloses a method of recording information using a laser on a multilayer optical disk (see Fig. 8) having a plurality of recording layers, the plurality of recording layers including a first recording layer (830) and a second recording layer (820), the second recording layer being a recording layer adjacent the first recording layer, the first recording layer having a first test writing area (836) to be used for calibration of write power and the second recording layer having a second test writing area (826) to be used for calibration of

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write power, wherein a first region of the first test writing area is superposed with a second region of the second test writing area when considered in the direction in which the laser is arranged to irradiate (portions of 826 and 836 overlap in Fig. 8), the method comprising: if the second region of the second test writing area is unrecorded, recording data in the second region of the second test writing area, thereby converting the second region of the second test writing area into a recorded state (§ [0121]); once the second region of the second test writing area has been converted into a recorded state, performing test writing in the first region of the first test writing area (§ [0111]).

Regarding claim 8, see the rejection of claim 1.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2, 3, 9, 10, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Kubo et al. (WO 2004/057585, hereinafter Kubo).

Regarding claim 2, Narumi does not explicitly disclose that the second recording layer is the next recording layer with respect to the first recording layer in the direction in which the laser is arranged to irradiate. However, Kubo discloses in Fig. 7(C) what could be a first recording layer (first recording layer) and a second recording layer (second recording layer), where the second recording layer is the next recording layer with respect to the first recording layer in the direction in which the laser is arranged to irradiate (as seen in Fig. 7(C)). Kubo further discloses the concept of making a predetermined area 105 of the second recording layer in a recorded state so as to perform test writing process (OPC) for the first recording layer in a state closer to the actual recording state (§ [0338]). Thus, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with the concept of Kubo so as to pre-record a layer of Narumi further from the layer on which test writing is to be performed before the test writing is performed with the motivation to perform the test writing

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on the layer in a state closer to the actual recording state since a re-writable disc is likely to have recorded recording states due to writing and re-writing.

Regarding claim 3, Narumi discloses that the optical disk includes a third recording layer (see Fig. 13), the third recording layer (1312) being the next recording layer with respect to the first recording layer (1322) in the opposite direction to that in which the laser is arranged to irradiate (as seen in Fig. 13), the third recording layer having a third test writing area (1316) to be used for calibration of write power, wherein a third region of the third test writing area is superposed with the first region of the first test writing area (1326) when considered in the direction in which the laser is arranged to irradiate (portions of 1316 and 1326 overlap in Fig. 13), the method comprising: if the third region of the third test writing area is unrecorded, recording data in the third region of the third test writing area, thereby converting the third region of the third test writing area into a recorded state (see ¶ [0121] which is applicable to Fig. 13); once the third region of the third test writing area has been converted into a recorded state, performing said test writing in the first region of the first test writing area (see ¶ [0111] which is applicable to Fig. 13).

Regarding claim 9, see the rejection of claim 2.

Regarding claim 10, see the rejection of claim 3.

Regarding claim 26, Narumi discloses before performing test writing in a first one of the test writing areas (836) of the recording layers (820, 830) in the optical disk except the recording layer (820) closest to a light beam entrance surface, recording data in a second one of the test writing areas (826) adjacent to the first one of the test writing areas (836) on a light beam entrance surface side thereof, thereby converting the second one of the test writing areas into a

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recorded state (875) (see ¶¶ [0111] and [0121]), but does not explicitly disclose before performing test writing in a first one of the test writing areas of the recording layers in the optical disk except the recording layer most remote from a light beam entrance surface, recording data in a second one of the test writing areas adjacent to the first one of the test writing areas on a side thereof opposite from the light beam entrance surface, thereby converting the second one of the test writing areas into a recorded state. However, Kubo discloses (see Fig. 7(C)) before performing test writing in a first one of the test writing areas (95) of the recording layers in the optical disk except the recording layer most remote from a light beam entrance surface, recording data in a predetermined area (105) adjacent to the first one of the test writing areas on a side thereof opposite from the light beam entrance surface, thereby converting the predetermined area into a recorded state. Kubo further discloses the concept of making a predetermined area 105 of the second recording layer in a recorded state so as to perform test writing process (OPC) for the first recording layer in a state closer to the actual recording state (¶ [0338]). Thus, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with the concept of Kubo so as to pre-record a layer of Narumi further from the layer on which test writing is to be performed before the test writing is performed with the motivation to perform the test writing on the layer in a state closer to the actual recording state since a re-writable disc is likely to have recorded recording states due to writing and re-writing.



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10. Claims 4/1, 4/2, 4/3, 5/1, 5/2, 5/3, 11/8, 11/9, 11/10, 12/8, 12/9, 12/10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Kubo further in view of Abe et al. (U.S. Pub. No. 2004/0161700 A1, hereinafter Abe).

Regarding claim 4/1, Narumi discloses that before performing the test writing in the first region of the first test writing area, if the first region of the first test writing area is unrecorded, the method comprises: recording data in the first region of the first test writing area, thereby converting the first region of the first test writing area into a recorded state (¶¶ [0111] and [0121]). Narumi does not explicitly disclose the additional step of clearing the first region of the first test writing area. However, Kubo discloses the concept of, when performing test writing on a target layer, making the state of other recording layers in the same recording medium to be closer to the actual recording state (¶¶ [0315], [0316], [0337], [0338]). Further, Abe discloses that overwriting (i.e. clearing) of a recording layer changes its crystalline state, and thus also changes the reflectivity of the recording layer (¶¶ [0029] and [0032]), where it is well-known that reflectivity and transmittance are related. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with Kubo with the motivation perform more suitable test writing by changing a recording state, and to combine the teachings of the teachings of Narumi in view of Kubo with Abe so as to clear the first region of the first test writing area, with the motivation to attain a state of a recording layer to be closer to the state of a recording layer in a rewritable recording medium by creating an overwritten state.

Regarding claim 4/2, Narumi discloses that before performing the test writing in the first region of the first test writing area, if the first region of the first test writing area is unrecorded,

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the method comprises: recording data in the first region of the first test writing area, thereby converting the first region of the first test writing area into a recorded state (¶¶ [0111] and [0121]). Narumi does not explicitly disclose the additional step of clearing the first region of the first test writing area. However, Kubo discloses the concept of, when performing test writing on a target layer, making the state of other recording layers in the same recording medium to be closer to the actual recording state (¶¶ [0315], [0316], [0337], [0338]). Further, Abe discloses that overwriting (i.e. clearing) of a recording layer changes its crystalline state, and thus also changes the reflectivity of the recording layer (¶¶ [0029] and [0032]), where it is well-known that reflectivity and transmittance are related. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the teachings of Narumi in view of Kubo with Abe so as to clear the first region of the first test writing area, with the motivation to attain a state of a recording layer to be closer to the state of a recording layer in a rewritable recording medium by creating an overwritten state.

Regarding claim 4/3, Narumi discloses that before performing the test writing in the first region of the first test writing area, if the first region of the first test writing area is unrecorded, the method comprises: recording data in the first region of the first test writing area, thereby converting the first region of the first test writing area into a recorded state (¶¶ [0111] and [0121]). Narumi does not explicitly disclose the additional step of clearing the first region of the first test writing area. However, Kubo discloses the concept of, when performing test writing on a target layer, making the state of other recording layers in the same recording medium to be closer to the actual recording state (¶¶ [0315], [0316], [0337], [0338]). Further, Abe discloses that overwriting (i.e. clearing) of a recording layer changes its crystalline state, and thus also

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changes the reflectivity of the recording layer (¶¶ [0029] and [0032]), where it is well-known that reflectivity and transmittance are related. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the teachings of Narumi in view of Kubo with Abe so as to clear the first region of the first test writing area, with the motivation to attain a state of a recording layer to be closer to the state of a recording layer in a rewritable recording medium by creating an overwritten state.

Regarding claim 5/1, see the rejection of claim 4/1.

Regarding claim 5/2, see the rejection of claim 4/2.

Regarding claim 5/3, see the rejection of claim 4/3.

Regarding claim 11/8, see the rejection of claim 4/1.

Regarding claim 11/9, see the rejection of claim 4/2.

Regarding claim 11/10, see the rejection of claim 4/3.

Regarding claim 12/8, see the rejection of claim 11/8.

Regarding claim 12/9, see the rejection of claim 11/9.

Regarding claim 12/10, see the rejection of claim 11/10.

11. Claims 15, 16, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi.

Regarding claim 15, Narumi discloses (see Fig. 8) a single-sided multilayer optical disk, comprising: a plurality of information rewritable recording layers (820, 830) each having a spiral track or concentric tracks formed thereon (well-known characteristic of optical recording mediums, and obvious from Fig. 1), wherein a test writing area (826, 836) to be used for

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calibration of write power is provided in each of the recording layers; and the test writing areas of adjacent two of the recording layers are superposed at least partly on each other in a view from a direction of incidence of a light beam (portions of 826 and 836 overlap in Fig. 8).

Regarding claim 16, Narumi discloses that the test writing area of each of the recording layers is provided in at least one of a center part and a peripheral part of the recording layer (see Fig. 3, which shows placement of test writing areas (126, 136) provided at a center part of the recording layer).

Regarding claim 25, Narumi discloses (see Fig. 8) before performing test writing in a first one of the test writing areas (836) of the recording layers (820, 830) in the optical disk except the recording layer (820) closest to a light beam entrance surface, recording data in a second one of the test writing areas (826) adjacent to the first one of the test writing areas (836) on a light beam entrance surface side thereof, thereby converting the second one of the test writing areas into a recorded state (875) (see ¶¶ [0111] and [0121]).

12. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Kim et al. (U.S. Pub. No. 2005/0013216 A1, hereinafter Kim).

Regarding claim 17, Narumi does not explicitly disclose that information to be used for the calibration of the write power is recorded in at least one of the recording layers in a process of manufacturing the single-sided multilayer optical disk. However, Kim discloses that information to be used for the calibration of the write power is recorded in at least one of the recording layers in a process of manufacturing (obvious because the information must be present on the disc before it is written/recorded to in order to serve its purpose) the single-sided

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multilayer optical disk (§ [0015]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with Kim with the motivation to minimize deterioration of performance when performing a layer jump (§ [0010]).

Regarding claim 18, Kim discloses that the information to be used for the calibration of the write power includes a plurality of calibration information items each set independently for a corresponding one of the recording layers (§ [0015]); and each of the calibration information items is recorded in the corresponding one of the recording layers (§ [0015]).

Regarding claim 19, Kim discloses that the information to be used for the calibration of the write power includes information set recording rate by recording rate (§ [0031]).

Regarding claim 20, Kim discloses that the information to be used for the calibration of the write power is recorded on a wobble shape of the spiral track or the concentric tracks in accordance with the information to be used for the calibration of the write power (§ [0054]). Although Kim does not disclose performing phase modulation, this would have already been obvious from Narumi, because it is disclosed in Narumi that the discs being used are phase-change optical discs (§ [0003]).

Regarding claim 21, Narumi does not explicitly disclose that optimum write strategy information for recording information in the recording layers is recorded in at least one of the recording layers in a process of manufacturing the single-sided multilayer optical disk. However, Kim discloses that optimum write strategy information (i.e. write power settings, § [0031]) for recording information in the recording layers is recorded in at least one of the recording layers in a process of manufacturing (obvious because the information must be present on the disc before it is written/recorded to in order to serve its purpose) the single-sided

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multilayer optical disk (¶ [0015]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with Kim with the motivation to minimize deterioration of performance when performing a layer jump (¶ [0010]).

Regarding claim 22, Kim discloses that the write strategy information includes a plurality of parameter information items each set independently for a corresponding one of the recording layers (¶ [0015]); and each of the parameter information items is recorded in the corresponding one of the recording layers (¶ [0015]).

Regarding claim 23, Kim discloses that the write strategy information includes information set recording rate by recording rate (¶ [0031]).

Regarding claim 24, Kim discloses that the write strategy information is recorded on a wobble shape of the spiral track or the concentric tracks in accordance with the write strategy information (¶ [0054]). Although Kim does not disclose performing phase modulation, this would have already been obvious from Narumi, because it is disclosed in Narumi that the discs being used are phase-change optical discs (¶ [0003]).

13. Claims 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Lee (U.S. Pub. No. 2005/0195711 A1).

Regarding claim 27, see the rejection of claim 25. Additionally, Narumi does not explicitly disclose a computer-readable recording medium on which recorded is a program for causing a computer to execute a method of recording information on the single-sided multilayer optical disk as set forth in claim 15. However, Lee discloses a computer-readable recording medium on which recorded is a program for causing a computer to execute a method of

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recording information on a disk. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with Lee with the motivation to use a well-known means of carrying out a disk-drive related task.

Regarding claim 29, first see the rejection of claim 25. Additionally, Narumi discloses an optical disk unit (see Fig. 9) capable of recording information on the single-sided multilayer optical disk as set forth in claim 15, the optical disk unit comprising: an optical pickup unit (903) configured to emit a light beam onto the optical disk (800); a controlling computer (901); and a processing unit (902). Narumi does not explicitly disclose a memory, the memory stores a program for causing the controlling computer to execute a method of recording the information on the optical disk the controlling computer obtains an optimum recording condition for the optical disk in accordance with the program stored in the memory; and the processor unit records the information on the optical disk with the optimum recording condition through the optical pickup unit. However, Lee discloses a memory (i.e. storage medium, ¶ [0033]), the memory stores a program (machine readable program 420) for causing the controlling computer (Fig. 2, element 130) to execute a method of recording the information on the optical disk (¶ [0033]), the controlling computer obtains an optimum recording condition for the optical disk in accordance with the program stored in the memory (¶¶ [0028] and [0033]); and the processor unit records the information on the optical disk with the optimum recording condition through the optical pickup unit (¶ [0033]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with Lee with the motivation to create a functioning apparatus for implementing the method described in the rejection of claim 25.

14. Claims 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Kubo further in view of Lee.

Regarding claim 28, see the rejection of claim 26. Additionally, Narumi in view of Kubo does not explicitly disclose a computer-readable recording medium on which recorded is a program for causing a computer to execute a method of recording information on the single-sided multilayer optical disk as set forth in claim 15. However, Lee discloses a computer-readable recording medium on which recorded is a program for causing a computer to execute a method of recording information on a disk. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi with Lee with the motivation to use a well-known means of carrying out a disk-drive related task.

Regarding claim 30, first see the rejection of claim 26. Additionally, Narumi discloses an optical disk unit (see Fig. 9) capable of recording information on the single-sided multilayer optical disk as set forth in claim 15, the optical disk unit comprising: an optical pickup unit (903) configured to emit a light beam onto the optical disk (800); a controlling computer (901); and a processing unit (902). Narumi in view of Kubo does not explicitly disclose a memory, the memory stores a program for causing the controlling computer to execute a method of recording the information on the optical disk the controlling computer obtains an optimum recording condition for the optical disk in accordance with the program stored in the memory; and the processor unit records the information on the optical disk with the optimum recording condition through the optical pickup unit. However, Lee discloses a memory (i.e. storage medium, ¶ [0033]), the memory stores a program (machine readable program 420) for causing the



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controlling computer (Fig. 2, element 130) to execute a method of recording the information on the optical disk (¶ [0033]), the controlling computer obtains an optimum recording condition for the optical disk in accordance with the program stored in the memory (¶¶ [0028] and [0033]); and the processor unit records the information on the optical disk with the optimum recording condition through the optical pickup unit (¶ [0033]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Narumi in view of Kubo with Lee with the motivation to create a functioning apparatus for implementing the method described in the rejection of claim 26.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Kubo et al. (U.S. Pat. No. 7,436,743 B2)
- Narumi et al. (U.S. Pat. No. 7,376,058 B2)

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK FISCHER whose telephone number is (571) 270-3549. The examiner can normally be reached on Monday-Friday from 9:00AM to 6:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Fischer/

Examiner, Art Unit 2627

4/10/2009

/HOA T NGUYEN/

Supervisory Patent Examiner, Art Unit 2627